



## Feed the Future Country Fact Sheet

Online Version: <https://feedthefuture.gov/article/food-security-all-stars-forge-bright-future-tanzania>

## Food Security All-Stars Forge a Bright Future for Tanzania

From improved seeds to thriving agricultural markets, Feed the Future works all along the value chain to help smallholder farmers and their families build more prosperous, food-secure futures. But these important changes have to be carried forward by a new generation of all-star leaders in agriculture and nutrition in the countries where the initiative works. That's where programs like the Innovative Agricultural Research Initiative (iAGRI) in Tanzania come in.

Through a partnership with Tanzanian institutions like Sokoine University of Agriculture and six U.S. land grant universities—Ohio State, Michigan State, University of Florida, Virginia Tech, Tuskegee University, and Iowa State—iAGRI supports higher education for promising young Tanzanian scholars. Funded by the U.S. Agency for International Development under Feed the Future, iAGRI's mission is to build a more sustainable food system through training, research and outreach, and empowering young people to apply their education and skills to some of Tanzania's greatest food security challenges.



### Papias Binagwa

Once an iAGRI-supported master's student at Tuskegee University, Papias Binagwa is now a national lead scientist for Tanzania's Ministry of Agriculture, Livestock and Fisheries, specializing in research on common beans, an important crop and source of protein for low-income Tanzanian families. "Tanzania supplies a lot of beans to bordering countries," he says. "We're ranked first in Africa for bean production and seventh in the world." Having excelled at Tuskegee, Binagwa had a chance to present his research at a Feed the Future Legume Innovation Lab workshop, connecting with leading bean researchers from around the world. Today, he's focusing on breeding beans to be more commercially appealing in the Tanzanian market, including varieties high in nutrients like zinc and iron that are important for children and pregnant women.



### **Glory Mhalu**

"I love babies, and I love to work with mothers," says Glory Mhalu, an iAGRI-sponsored master's student of nutrition at Michigan State University. In a bustling Tanzanian classroom, where she's helping mothers feed enriched porridge to their children as part of her research, she explains how vitamin A deficiency is a big problem across Sub-Saharan Africa. "I thought that if we can incorporate vitamin A into something children already eat, then we could solve that problem." Mhalu is teaching mothers how to dry and process orange-fleshed sweet potatoes to increase the nutritional value of uji, a cornmeal-based porridge that many rural Tanzanian women feed to young children. After a month and several more feedings like this one, she'll measure vitamin A levels in the children's blood and record their height and weight to learn how effective her intervention is.

Mhalu was inspired to pursue her master's degree after seeing her mother work with other young mothers at their church to build skills in cooking and sewing. "I thought that if my mom can do this without an education, imagine what I could do if I got one. She was able to reach a small group of women, but if I got a degree, I could potentially reach thousands."

*Editor's note: Mhalu has also participated in a Feed the Future-supported fellowship at Purdue University.*



### **Boniface Massawe**



Boniface Massawe has the distinction of being the first doctoral student under iAGRI to complete his studies and defend his dissertation, graduating from Ohio State University in August 2015 with a degree in environment and natural resources, specializing in soil sciences. “Without soil, there is no life,” he says. Massawe’s research focused on digital soil mapping, using geographic information system (GIS) tools to assess the suitability of land for rice production in Tanzania. “Rice grown in the Kilombero Valley has the potential to feed the entire country if appropriate farming practices are followed,” he explains, and with better information, farmers can learn in advance if the soil on their land is well-suited to rice production.

*Editor’s note: Massawe has also participated in a Feed the Future-supported fellowship at the University of California, Davis.*



### **Elizabeth Isaya**

Years ago, Elizabeth Isaya was one of the few female students at the University of Dar es Salaam who took a computer science course. She knows firsthand how important it is to empower women in fields where they are traditionally underrepresented or marginalized. That’s why, with a scholarship from iAGRI, she completed her thesis on how women farmers in Tanzania source their information on agriculture as part of her work to earn a master’s degree in agricultural communications from Ohio State University and Sokoine University of Agriculture. “Women farmers constitute the majority of farmers in Tanzania. Knowing how they source their information will enable the Tanzanian government and international organizations to directly channel information to women farmers,” she says. Today, Isaya teaches courses on microcomputers, software engineering and program management at Sokoine University, and she hopes to pursue a doctoral degree in the future.



### **Kangile Joseph**

Kangile Joseph was a talented agricultural economics and agribusiness student at Sokoine University of Agriculture, earning his bachelor's degree with a 4.3 GPA. But like many young college graduates, he found himself in a competitive job market without all the skills he needed. After building some experience as a research assistant and, later, as a microfinance loan officer, he applied for an iAGRI scholarship to earn a master's degree in agricultural and applied economics at Sokoine University as well as the University of Pretoria in South Africa. Again he excelled as a student, this time building a stronger professional network and leadership skills, and finally he completed his thesis on how cooperative irrigation schemes impact production efficiency among smallholder rice farmers in Tanzania. Today, armed with new confidence, he heads up research for the socioeconomics and farming systems section of Tanzania's Ministry of Agriculture, Livestock, and Fisheries, working to expand labor-saving technologies, agricultural input usage, and participation in cooperatives of smallholder farmers so they can achieve economies of scale.

*All photos courtesy of the Innovative Agricultural Research Initiative (iAGRI).*